

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1. (Previously Presented) A method of producing a cathode material for a lithium secondary cell, comprising the steps of preparing a solution selected from the group consisting of an alkaline solution, a carbonate solution, and a hydrogencarbonate solution, with either an oxide or a carbonate of a metal, as the major component of the cathode material for the lithium secondary cell, suspended therein, dripping an aqueous solution of a salt of another element into the solution, precipitating and bonding a compound of the other element on the surface of the oxide or carbonate of the metal, as the major component, subsequently preparing a mixture by mixing either the oxide or the carbonate of the metal, as the major component, with the compound of the other element, precipitated and bonded thereon, with a lithium compound, and firing the mixture.

2. (Previously Presented) A method of producing a cathode material for a lithium secondary cell, according to Claim 1, wherein either the oxide or the carbonate of the metal, as the major component, is an oxide or carbonate of an element selected from the group consisting of elements Co, Mn, and Ni.

3. (Previously Presented) A method of producing a cathode material for a lithium secondary cell, according to Claim 1, wherein the other element is at least one element selected from the group consisting of Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Li, Na, K, Rb, Cs, Fr, Be, Mg, Ca, Sr, Ba, Ra, B, and Al.

4. (Previously Presented) A method of producing a cathode material for a lithium secondary cell, according to Claim 1, wherein the ratio of either the oxide or the carbonate of the metal, as the major component, to the other element is in the range of 99:1 to 40:60, in terms of mole ratio.

5. (Previously Presented) A method of producing a cathode material for a lithium secondary cell, according to Claim 1, wherein either the oxide or the carbonate of the metal, as the major component, is a Mn oxide or Mn carbonate, and the other element is at least one element selected from the group consisting of Co, Ni, Al, Mg, and Ti.

6. (Previously Presented) A method of producing a cathode material for a lithium secondary cell, according to Claim 1, wherein either the oxide or the carbonate of the metal, as the major component, is a Co oxide or Co carbonate, and the other element is at least one element selected from the group consisting of Mn, Ni, Al, Mg, and Ti.

7. (Previously Presented) A method of producing a cathode material for a lithium secondary cell, according to Claim 1, wherein either the oxide or the carbonate of the metal, as the major component, is a Ni oxide or Ni carbonate, and the other element is at least one element selected from the group consisting of Co, Mn, Al, Mg, and Ti.

8. (Previously Presented) A method of producing a cathode material for a lithium secondary cell, according to Claim 1, wherein the oxide or the carbonate of the metal is an oxide or carbonate of Co or Mn and the other element is at least one member selected from the group consisting of Sc, Ti, V, Cr, Mn, Fe, Co, Cu, Li, Na, K, Rb, Cs, Fr, Be, Mg, Ca, Sr, Ba, Ra, B and Al.

9. (New) A method of producing a cathode material for a lithium secondary cell, according to Claim 1, wherein a carbonate of a metal is used as the major component.